## PATENT ABSTRACTS OF JAPAN

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## (54) GAS SEPARATION MEMBRANE

## (57) Abstract:

PURPOSE: To obtain a gas separation membrane excellent in oxygen permeability, by using a polyurethane/silicone copolymer prepared by introducing a polysiloxane structure into the main chain of polyurethane.

CONSTITUTION: A polyurethane/silicone copolymer obtained by heating and reacting diisocyanate and

polysiloxane type diol in an org. solvent or a ternary copolymer obtained by further using diol as a third component is dissolved in a film forming solvent to be cast and applied onto an appropriate support substrate and the solvent is evaporated from the formed film by heat treatment to obtain a homogenous membrane with a thickness of 0.05W30 $\mu$ m. When sputter etching treatment is applied to the surface of this membrane, coefficient of gas permeation and coefficient of gas separation are further enhanced.

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